

**PHYSICS 2204**  
**STSE- PLASTICS AND MODERN LIFE**



Student Name: \_\_\_\_\_

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**PART A: MULTIPLE CHOICE:** Place the correct answer in the space provided on the answer sheet.

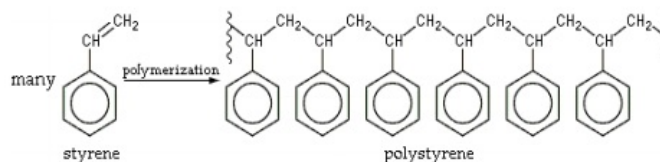
1. What language does the word plastic originate from?
  - (A) English
  - (B) Latin
  - (C) Greek
  - (D) French
  
2. What does the word plastic mean?
  - (A) To form
  - (B) To hold together
  - (C) To mold
  - (D) To be heated
  
3. Which of the following best describes plastics
  - (A) Plastic is a material that can be cooled and molded into different shapes, which remain after it cools
  - (B) Plastic is a material that can be heated and molded into the same shape, which remain after it heated
  - (C) Plastic is a material that can be heated and molded into different shapes, which remain after it is heated
  - (D) Plastic is a material that can be heated and molded into different shapes, which remain after it cools
  
4. What was used before plastic was invented?
  - (A) Glass
  - (B) Clay
  - (C) Glass and clay
  - (D) Cement
  
5. Why did people like to use plastics?
  - (I) Very Light
  - (II) Very durable
  - (III) Very easy to transport things
  - (IV) They do not react with other substances
  - (A) I
  - (B) I and II
  - (C) I, II and III
  - (D) I, II, III and IV

6. Why are snowmobile builders using plastic to build their hoods?
- (I) They are strong
  - (II) They are light
  - (III) They allow machines to go faster
- (A) I
  - (B) I and II
  - (C) II and III
  - (D) I, II and III
7. How many different types of plastics are there?
- (A) 1
  - (B) 2
  - (C) 3
  - (D) 4
8. Which of the following is a protein in animals that is responsible for holding together ligaments, cartilage, and tendons
- (A) Collagen
  - (B) Soy
  - (C) Oil
  - (D) Wood pulp
9. What did North American Indians use to make their tools?
- (A) Collagen
  - (B) Soy
  - (C) Oil
  - (D) Wood pulp
10. What did Henry Ford use to make plastic parts for his cars?
- (A) Collagen
  - (B) Soy
  - (C) Oil
  - (D) Wood pulp
11. What is used to make cellophane?
- (A) Collagen
  - (B) Soy
  - (C) Oil
  - (D) Wood pulp
12. Which of the following is not used to make natural plastics?
- (A) Collagen
  - (B) Soy
  - (C) Oil
  - (D) Wood pulp
13. What is a synthetic oil made from?
- (A) Collagen
  - (B) Soy
  - (C) Oil
  - (D) Wood pulp

14. What is the main element found in oil?
- (A) Bromine  
 (B) Carbon  
 (C) Oxygen  
 (D) Sulfur
15. Oil contains short chains of carbon called monomers
- (A) True  
 (B) False
16. Polymers are larger molecules formed from the joining of monomers
- (A) True  
 (B) False
17. All plastics are safe to store water
- (A) True  
 (B) False
18. What two types of chemical reactions are used to make plastics?
- (A) Condensation reaction and subtraction reaction.  
 (B) Condensation reaction and addition reaction.  
 (C) Evaporation reaction and subtraction reaction  
 (D) Evaporation reaction and addition reaction

19. What type of reaction is shown below?

- (A) Addition reaction  
 (B) Condensation Reaction  
 (C) Evaporation reaction  
 (D) Subtraction reaction



20. What are the two main types that plastics can be classified as?
- (A) Polyurethane and polyester  
 (B) thermoset and thermoplastics.  
 (C) Heatoset and heatoplastics  
 (D) Epoxy and polyester
21. Which of the following is not a thermoset plastic?
- (A) Polyurethane  
 (B) Polyesters  
 (C) Epoxy resins  
 (D) Polyethylene
22. Which of the following is a thermoplastics?
- (A) Polyethylene  
 (B) Polypropylene  
 (C) Both A and B are correct  
 (D) Neither A and B are correct

23. Thermoplastics are harder than thermoset plastics ?

- (A) True
- (B) False

24. Which of the following is referred to as Styrofoam?

- (A) Polystyrene
- (B) Polyvinyl Chloride (PVC)
- (C) Polytetrafluoroethane (Teflon®)
- (D) Polyvinylidene Chloride

25. Which of the following is used to make water pipes?

- (A) Polystyrene
- (B) Polyvinyl Chloride
- (C) Polytetrafluoroethane
- (D) Polyvinylidene Chloride

26. Which of the following is also called Teflon?

- (A) Polystyrene
- (B) Polyvinyl Chloride
- (C) Polytetrafluoroethane
- (D) Polyvinylidene Chloride

27. Which of the following is used for plastic wraps?

- (A) Polystyrene
- (B) Polyvinyl Chloride
- (C) Polytetrafluoroethane
- (D) Polyvinylidene Chloride

**PART B: LONG ANSWER QUESTIONS**

1. (A) What is wrong with society using plastics?

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(B) What can be done to solve (or reduce) the negative points or impacts associated with using plastics?

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2. Using examples, discuss how important plastics are to humans

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